PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL WITH STREET LIGHTING AT THE INTERSECTION OF MD 2 AND THE PROPOSED GLEN BURNIE TOWN CENTER ENTRANCE IN ANNE ARUNDEL COUNTY. MD 2 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE, WITH THE MD 2 APPROACHES OPERATING CONCURRENTLY AND THE GLEN BURNIE TOWN CENTER / McDONALDS APPROACHES OPERATING CONCURRENTLY.

EXCLUSIVE LEFT TURN PHASES WILL BE PROVIDED FOR NORTHBOUND AND SOUTHBOUND MD 2.

THIS SIGNAL WILL BE HARDWIRE INTERCONNECTED TO THE EXISTING MD 2 SYSTEM.

CONTROLLER REQUIREMENTS

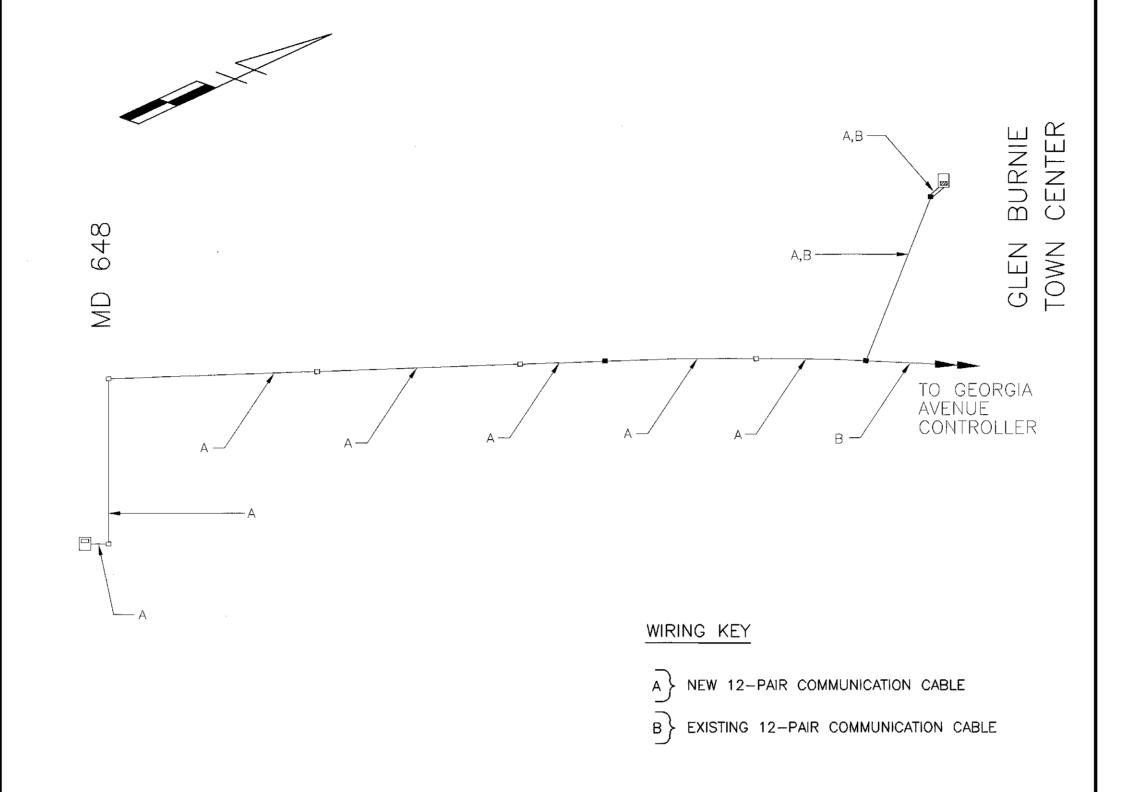
INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH THREE (3) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS RACK MOUNT, TELEMETRY MODULE AND RACK DETECTOR SYSTEM HOUSED IN A NEMA SIZE '6' BASE MOUNTED CABINET.

SPECIAL NOTES

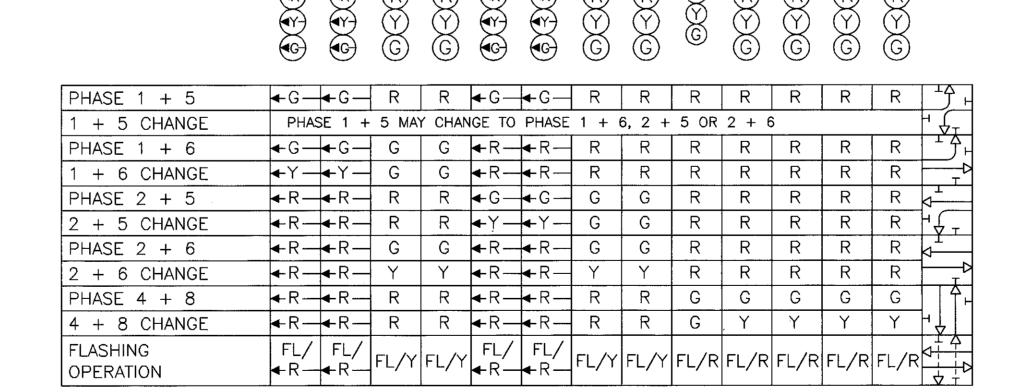
- 1) NO EQUIPMENT WILL BE SUPPLIED BY THE SHA ON THIS PROJECT
- 2) CONTROLLER AND CABINET SHALL BE DELIVERED TO MSHA SHOP AT 7491 CONNELLEY DR. ,HANOVER MARYLAND FOR WIRING AND TESTING, CONTACT MR. ED RODENHIZER AT (410) 787-7652 AND ALLOW 14 DAYS FOR COMPLETION.

WIRING DIAGRAM K,L,M,N,O,P,Q,R,W,X,CC,GG ¬ — 0,P,Q,R,W A,B,C,D,E,F,K,L,M,N,O,P,Q,R, S,T,U,V,W,X,DD,EE,FF,GG A,B,C,D,E,F,S,T,U,VK,L,M,N,O,P,Q,R,W,X,BB,GG -A,B,K,L,M,N _____ – P,Q,R,W C,D,S,T,U,V -----A,B,G,K,L,M,N ---- $_{ m O,P,Q,R,W,GG}$ A,B,L,M,N — A,B,M,N — /— — Q,R,W WIRING KEY 2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED) NO. 14 A.W.G. MICRO-LOOP PROBE LEAD-IN 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) -CONDUCTOR ELECTRICAL CABLE NO. 12 A.W.G.) TRAY CABLE 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ML > MICRO-LOOP PROBE SET STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.) LW LOOP WIRE (NO. 14 A.W.G.) PS PROPOSED OVERHEAD ELECTRIC SERVICE BY BG&E 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) . 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.) + 3/4 IN. X 10 FT. GROUND ROD

INTERCONNECT SKETCH



PHASE CHART



Millersville, MD 21108

(410) 987-0427

EQUIPMENT LIST

3

MD

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

| ITEM NO. | QUANTITY | DESCRIPTION |
|-------------|-----------|--|
| 1001 | 1 EACH | MAINTENANCE OF TRAFFIC |
| 2001 | 5 C.Y. | TEST PIT EXCAVATION |
| | 30 L.F. | 5 IN. WHITE THERMOPLASTIC PAVEMENT MARKING TAPE |
| | 200 L.F. | 24 IN. WHITE THERMOPLASTIC PAVEMENT MARKING TAPE |
| 8001 | 22 C.Y. | FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION |
| 8009 | 640 L.F. | FURNISH AND INSTALL STEEL SPAN WIRE - 3/8 IN. DIAMETER |
| 8010 | 640 L.F. | FURNISH AND INSTALL STEEL SPAN WIRE - 1/4 IN. DIAMETER |
| 8017 | 4 EACH | FURNISH AND INSTALL MICRO-LOOP PROBE SET WITH 1000 FT. LEAD-IN |
| 8021 | 780 L.F. | FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR) |
| 8022 | 80 L.F. | FURNISH AND INSTALL 1 IN. ELECTRICAL CONDUIT - GALVANIZED SLEEVE |
| 8023 | 50 L.F. | FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT - DETECTOR SLEEVE |
| 8024 | 100 L.F. | FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED) |
| 8027 | 40 L.F. | FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED) |
| 8030 | 20 L.F. | FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED) |
| 8031 | 210 L.F. | FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT (SLOTTED) |
| 8033 | 8 EACH | FURNISH AND INSTALL ELECTRICAL HANDHOLE |
| 8034 | 5 EACH | FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIA. X 10 FT. LENGTH |
| 8039 | 1050 L.F. | FURNISH AND INSTALL 12-PAIR COMMUNICATION CABLE, JELLY FILLED (UNDERGROUND) |
| 8040 | 2700 L.F. | FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.) |
| 8041 | 1350 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR ALUMINUM SHIELDED (NO. 14 A.W.G.) |
| 8044 | 140 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.) |
| 8045 | 1960 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.) |
| 8046 | 600 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.) |
| 8049 | 70 L.F. | FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.) |
| 8050 | 45 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR (NO. 4 A.W.G.) THNN/THWN |
| 8052 | 144 L.F. | FURNISH AND INSTALL WOOD SIGN SUPPORTS - 4 IN. X 6 IN. |
| 8056 | 2 EACH | FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL |
| 8057 | 2 EACH | FURNISH AND INSTALL 15 FT. LIGHTING BRACKET FOR TRAFFIC SIGNAL STRUCTURE |
| 8070 | 1 EACH | CONTROL AND DISTRIBUTION EQUIPMENT |
| 8087 | 4 EACH | FURNISH AND INSTALL 14 IN. 0+0 GUAGE 32 FT. STRAIN POLE |
| | 3 EACH | FURNISH AND INSTALL DETECTOR AMPLIFIER, 4-CHANNEL RACK MOUNT |
| | 1 EACH | FURNISH AND INSTALL DETECTOR RACK POWER SUPPLY |
| | 1 EACH | FURNISH AND INSTALL CONTROLLER - ASC II WITH TELEMETRY MODULE |
| | 1 EACH | FURNISH AND INSTALL CABINET WITH TELEMETRY (SYSTEM CABINET), SIZE 6 |
| | 8 EACH | FURNISH AND INSTALL 12 IN., ONE-WAY, THREE-SECTION (R,Y,G) TRAFFIC SIGNAL HEAD WITH TUNNEL VISORS AND ADJUSTABLE BRACKET FOR SPAN WIRE MOUNTING |
| | 4 EACH | FURNISH AND INSTALL 12 IN., ONE-WAY, THREE-SECTION (RA,YA,GA) TRAFFIC SIGNAL HEAD WITH TUNNEL VISORS AND ADJUSTABLE BRACKET FOR SPAN WIRE MOUNTING |
| | 132 S.F. | FURNISH AND INSTALL SHEET ALUMINUM SIGNS TO CONSIST OF THE FOLLOWING: |
| | | 1 EACH R3-5(L) SIGN (30 IN. X 36 IN.) - SPAN WIRE MOUNT |
| | | - 1 EACH R3-5(R) SIGN (30 IN. X 36 IN.) - SPAN WIRE MOUNT |
| | | - 4 EACH W3-3 SIGN (48 IN. X 48 IN.) WITH "NEW" PANEL |
| | | (30 IN. X 30 IN.) — GROUND MOUNT |
| | 4 51011 | - 2 EACH ROUTE MARKER SIGN (72 IN. X 24 IN.) - SPAN WIRE MOUNT |
| | 1 EACH | FURNISH AND INSTALL 8 IN., ONE—WAY, THREE—SECTION (R,Y,G) TRAFFIC SIGNAL HEAD WITH TUNNEL VISORS AND ADJUSTABLE BRACKET FOR SPAN WIRE MOUNTING |
| | | |
| | | |

NOTE: ITEM NUMBERS CORRESPOND TO MSHA AREAWIDE CONTRACT

APPROVALS REVISIONS TRAFFIC CONCEPTS, INC. ASSISTANT DIVISION CHIEF ASST. DISTRICT ENGINEER, TRAFFIC Brightview Business Center 8258 Veterans Highway Suite 19B

<u>3-19-98</u>

DATE:

SCALE:

APPROVED BY:

CHIEF, TRAFFIC ENG. DESSIGN DIV.

DIR., OFFICE OF TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION GENERAL INFORMATION SHEET

MD 2 AND GLEN BURNIE TOWN CENTER

OZ 000Z Z 9.39

SHEET NO.

_2__ OF <u>_2</u>

PLAN

SHEET NO .: TS-38/7 ANNE ARUNDEL

DRAWN BY: <u>T. ZAYDEL</u> F.A.P. NO. DESIGNED BY: T. ZAYDEL S.H.A. NO. COUNTY